

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A cellular communication system comprising:
a cell station which provides a communication service for a personal station,
said cell station executing continuous interference monitoring ~~of an interfering wave~~
during a requested period;
said cell station receiving said requested period from a maintenance terminal and then
producing interference ~~monitor~~ data representative of ~~[[a]]~~ at least one property of an said
interfering wave, or said interference data representative of an absence of an interference wave;
and
said maintenance terminal ~~which produces~~ requesting said requested period and pro-
ducing a data record of ~~[[an]]~~ at least one interference profile based on said at least one property.
2. (original): The cellular communication system according to claim 1, wherein said cell
station includes an antenna, and both of said communication service and said continuous moni-
toring are achieved through said antenna.

3. (currently amended): The cellular communication system according to claim 1, wherein said cell station includes a monitoring unit which continuously monitors an electric field intensity of said interfering wave during said requested period, and

said at least one property includes said electric field intensity.

4. (currently amended): The cellular communication system according to claim 1, wherein said maintenance terminal sends first and second requests, and

said cell station provides said communication service in response to said first request, and monitors said ~~interfering wave~~ interference data in response to said second request.

5. (currently amended): The cellular communication system according to claim 1, wherein said maintenance terminal displays said at least one interference profile.

6. (original): The cellular communication system according to claim 1, wherein said communication service is executed based on a TDMA system protocol, and

said period includes a slot determined by said TDMA system protocol.

7. (original): The cellular communication system according to claim 6, wherein said cell station checks whether said slot is used for providing said communication service, and continuously monitors said interfering wave during said slot when said slot is not used for providing said communication service.

8. (currently amended): A cellular communication system comprising:

a plurality of cell stations which provide a communication service for a personal station, each of said cell stations continuously monitoring ~~an interfering wave~~ interference during a requested period to produce interference ~~monitor~~ data at least representative of an electric field intensity of ~~said an~~ an interfering wave;

said cell station receiving said requested period from a maintenance terminal;

said ~~[[a]]~~ maintenance terminal which requests said requested period and receives said interference ~~monitor~~ data from each of said cell stations, produces a data record of an interference profile and determines an incoming direction of an interfering wave based on said interference ~~monitor~~ data.

9. (currently amended): A method of operating a cellular communication system comprising:

providing a communication service for a personal station by a cell station;

continuously monitoring of an interfering wave during a requested period by said cell station;

requesting of said request period by a maintenance terminal;

said cell station receiving said requested period from a maintenance terminal and then producing an interference ~~monitor~~ data representative of ~~[[a]]~~ at least one property of ~~said an~~ an interfering wave; and

producing a data record of an interference profile based on said at least one property.

10. (original): The method according to claim 9, wherein both of providing said communication service and said continuous monitoring are achieved through the same antenna included in said cell station.

11. (currently amended): The method according to claim 9, wherein said continuously monitoring includes ~~continuously monitoring~~ an electric field intensity of said interfering wave during said requested period. ~~and said property includes said electric field intensity.~~

12. (currently amended): The method according to claim 9, ~~further comprising receiving a request by a user interface,~~ wherein ~~said providing said communication service and said~~ continuously monitoring of said interfering wave are exclusively executed in response to said request.

13. (original): The method according to claim 9, wherein said communication service is executed based on a TDMA system protocol, and said period includes a slot determined by said TDMA system protocol.

14. (original): The method according to claim 13, further comprising checking whether said slot is used for providing said communication service, wherein said continuously monitoring is executed during said slot when said slot is not used for providing said communication service.

15. (currently amended): A method of operating a cellular communication system comprising:

providing a communication service for a personal station by a plurality of cell stations;

continuously monitoring of an interfering wave during a requested period by said plurality of cell stations ~~cell stations~~;

requesting said request period by a plurality of maintenance terminals;

said plurality of cell station receiving said requested period from a maintenance terminal
and then producing interference ~~monitor~~ data at least representative of electric field intensities of ~~said an~~ interfering wave by each of said plurality of cell stations ~~cell stations~~; and

determining an incoming direction of said interfering wave based on said interference ~~monitor~~ data.

16. (new): The cellular communication system according to claim 1, wherein said requesting said requested period is independent of concurrent or impending communication signal transmission.

17. (new): The cellular communication system according to claim 1, wherein said maintenance terminal sends a request for said interference data to said cell station, and

said cell station continuously records said interference data during the requested period, and produces a data record of said at least one interference profile.

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Appln. No. 10/015,795
Amendment Under 37 C.F.R. § 1.111

18. (new): The cellular communication system according to claim 1, wherein said maintenance terminal displays said at least one property of said interference data in a profile, as a function of at least one variable.

19. (new): The cellular communication system according to claim 1, wherein said cell station includes an interference monitor for acquisition of said interference data.